



SEQUENCE LISTING

<110> Ray, Animesh
Golden, Teresa Ann

<120> GENE ENCODING SHORT INTEGUMENTS AND USES THEREOF

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<140> 09/590,968

<141> 2000-06-09

<150> 60/138,316

<151> 1999-06-09

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<170> PatentIn Ver. 2.1

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<213> Arabidopsis thaliana

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Val Ser Glu Phe Asp Pro Ser Ser Val Ala Val Asn Glu Ser Thr Asp

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| 50 | 55 | 60 |
| Asp Ser Ile Lys Asn Gly Gly Gly Leu Pro Asn Asn Gly Val Ser Asp | | |
| 65 | 70 | 75 |
| Thr Asn Ser Gln Ile Asn Glu Val Thr Val Thr Pro Gln Val Ile Ala | | |
| 85 | 90 | 95 |
| Lys Glu Thr Val Lys Glu Asn Gly Leu Gln Lys Asn Gly Gly Lys Arg | | |
| 100 | 105 | 110 |
| Asp Glu Phe Ser Lys Glu Glu Gly Asp Lys Asp Arg Lys Arg Ala Arg | | |
| 115 | 120 | 125 |
| Val Cys Ser Tyr Gln Ser Glu Arg Ser Asn Leu Ser Gly Arg Gly His | | |
| 130 | 135 | 140 |
| Val Asn Asn Ser Arg Glu Gly Asp Arg Phe Met Asn Arg Lys Arg Thr | | |
| 145 | 150 | 155 |
| Arg Asn Trp Asp Glu Ala Gly Asn Asn Lys Lys Lys Arg Glu Cys Asn | | |
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| Asn Tyr Arg Arg Asp Gly Arg Asp Arg Glu Val Arg Gly Tyr Trp Glu | | |
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| Arg Asp Lys Val Gly Ser Asn Glu Leu Val Tyr Arg Ser Gly Thr Trp | | |
| 195 | 200 | 205 |
| Glu Ala Asp His Glu Arg Asp Val Lys Lys Val Ser Gly Gly Asn Arg | | |
| 210 | 215 | 220 |
| Glu Cys Asp Val Lys Ala Glu Glu Asn Lys Ser Lys Pro Glu Glu Arg | | |
| 225 | 230 | 235 |
| Lys Glu Lys Val Val Glu Glu Gln Ala Arg Arg Tyr Gln Leu Asp Val | | |
| 245 | 250 | 255 |
| Leu Glu Gln Ala Lys Ala Lys Asn Thr Ile Ala Phe Leu Glu Thr Gly | | |
| 260 | 265 | 270 |
| Ala Gly Lys Thr Leu Ile Ala Ile Leu Leu Ile Lys Ser Val His Lys | | |
| 275 | 280 | 285 |
| Asp Leu Met Ser Gln Asn Arg Lys Met Leu Ser Val Phe Leu Val Pro | | |

| | | | | |
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| Lys Val Pro Leu Val Tyr Gln Gln Ala Glu Val Ile Arg Asn Gln Thr | | | | |
| 305 | | 310 | | 315 320 |
| Cys Phe Gln Val Gly His Tyr Cys Gly Glu Met Gly Gln Asp Phe Trp | | | | |
| | 325 | | 330 | 335 |
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| Met Glu Thr Ile Asp Leu Leu Ile Leu Asp Glu Cys His His Ala Val | | | | |
| | 370 | | 375 | 380 |
| Lys Lys His Pro Tyr Ser Leu Val Met Ser Glu Phe Tyr His Thr Thr | | | | |
| 385 | | 390 | | 395 400 |
| Pro Lys Asp Lys Arg Pro Ala Ile Phe Gly Met Thr Ala Ser Pro Val | | | | |
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| Asn Leu Glu Thr Lys Leu Asp Ser Thr Val Cys Thr Ile Lys Asp Arg | | | | |
| | 435 | | 440 | 445 |
| Lys Glu Leu Glu Lys His Val Pro Met Pro Ser Glu Ile Val Val Glu | | | | |
| | 450 | | 455 | 460 |
| Tyr Asp Lys Ala Ala Thr Met Trp Ser Leu His Glu Thr Ile Lys Gln | | | | |
| 465 | | 470 | | 475 480 |
| Met Ile Ala Ala Val Glu Glu Ala Ala Gln Ala Ser Ser Arg Lys Ser | | | | |
| | 485 | | 490 | 495 |
| Lys Trp Gln Phe Met Gly Ala Arg Asp Ala Gly Ala Lys Asp Glu Leu | | | | |
| | 500 | | 505 | 510 |
| Arg Gln Val Tyr Gly Val Ser Glu Arg Thr Glu Ser Asp Gly Ala Ala | | | | |
| | 515 | | 520 | 525 |
| Asn Leu Ile His Lys Leu Arg Ala Ile Asn Tyr Thr Leu Ala Glu Leu | | | | |
| | 530 | | 535 | 540 |
| Gly Gln Trp Cys Ala Tyr Lys Val Gly Gln Ser Phe Leu Ser Ala Leu | | | | |

| | | | | | | |
|---|-----|-----|-----|-----|-----|-----|
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| | 565 | | 570 | | 575 | |
| Ser Tyr Leu Ser Glu Val Val Ser Leu Leu Gln Cys Glu Leu Leu Glu | | | | | | |
| | 580 | | 585 | | 590 | |
| Gly Ala Ala Ala Glu Lys Val Ala Ala Glu Val Gly Lys Pro Glu Asn | | | | | | |
| | 595 | | 600 | | 605 | |
| Gly Asn Ala His Asp Glu Met Glu Glu Gly Glu Leu Pro Asp Asp Pro | | | | | | |
| | 610 | | 615 | | 620 | |
| Val Val Ser Gly Gly Glu His Val Asp Glu Val Ile Gly Ala Ala Val | | | | | | |
| | 625 | | 630 | | 635 | |
| Ala Asp Gly Lys Val Thr Pro Lys Val Gln Ser Leu Ile Lys Leu Leu | | | | | | |
| | 645 | | 650 | | 655 | |
| Leu Lys Tyr Gln His Thr Ala Asp Phe Arg Ala Ile Val Phe Val Glu | | | | | | |
| | 660 | | 665 | | 670 | |
| Arg Val Val Ala Ala Leu Val Leu Pro Lys Val Phe Ala Glu Leu Pro | | | | | | |
| | 675 | | 680 | | 685 | |
| Ser Leu Ser Phe Ile Arg Cys Ala Ser Met Ile Gly His Asn Asn Ser | | | | | | |
| | 690 | | 695 | | 700 | |
| Gln Glu Met Lys Ser Ser Gln Met Gln Asp Thr Ile Ser Lys Phe Arg | | | | | | |
| | 705 | | 710 | | 715 | |
| Asp Gly His Val Thr Leu Leu Val Ala Thr Ser Val Ala Glu Glu Gly | | | | | | |
| | 725 | | 730 | | 735 | |
| Leu Asp Ile Arg Gln Cys Asn Val Val Met Arg Phe Asp Leu Ala Lys | | | | | | |
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| Thr Val Leu Ala Tyr Ile Gln Ser Arg Gly Arg Ala Arg Lys Pro Gly | | | | | | |
| | 755 | | 760 | | 765 | |
| Ser Asp Tyr Ile Leu Met Val Glu Arg Gly Asn Val Ser His Ala Ala | | | | | | |
| | 770 | | 775 | | 780 | |
| Phe Leu Arg Asn Ala Arg Asn Ser Glu Glu Thr Leu Arg Lys Glu Ala | | | | | | |
| | 785 | | 790 | | 795 | |
| Ile Glu Arg Thr Asp Leu Ser His Leu Lys Asp Thr Ser Arg Leu Ile | | | | | | |

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| Ser Ile Asp Ala Val Pro Gly Thr Val Tyr Lys Val Glu Ala Thr Gly | | |
| 820 | 825 | 830 |
| Ala Met Val Ser Leu Asn Ser Ala Val Gly Leu Val His Phe Tyr Cys | | |
| 835 | 840 | 845 |
| Ser Gln Leu Pro Gly Asp Arg Tyr Ala Ile Leu Arg Pro Glu Phe Ser | | |
| 850 | 855 | 860 |
| Met Glu Lys His Glu Lys Pro Gly Gly His Thr Glu Tyr Ser Cys Arg | | |
| 865 | 870 | 875 |
| Leu Gln Leu Pro Cys Asn Ala Pro Phe Glu Ile Leu Glu Gly Pro Val | | |
| 885 | 890 | 895 |
| Cys Ser Ser Met Arg Leu Ala Gln Gln Ala Val Cys Leu Ala Ala Cys | | |
| 900 | 905 | 910 |
| Lys Lys Leu His Glu Met Gly Ala Phe Thr Asp Met Leu Leu Pro Asp | | |
| 915 | 920 | 925 |
| Lys Gly Ser Gly Gln Asp Ala Glu Lys Ala Asp Gln Asp Asp Glu Gly | | |
| 930 | 935 | 940 |
| Glu Pro Val Pro Gly Thr Ala Arg His Arg Glu Phe Tyr Pro Glu Gly | | |
| 945 | 950 | 955 |
| Val Ala Asp Val Leu Lys Gly Glu Trp Val Ser Ser Gly Lys Glu Val | | |
| 965 | 970 | 975 |
| Cys Glu Ser Ser Lys Leu Phe His Leu Tyr Met Tyr Asn Val Arg Cys | | |
| 980 | 985 | 990 |
| Val Asp Phe Gly Ser Ser Lys Asp Pro Phe Leu Ser Glu Val Ser Glu | | |
| 995 | 1000 | 1005 |
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| Ser Met Asp Leu Tyr Val Ala Arg Ala Met Ile Thr Lys Ala Ser Leu | | |
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| Ala Phe Lys Gly Ser Leu Asp Ile Thr Glu Asn Gln Leu Ser Ser Leu | | |
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| Lys Lys Phe His Val Arg Leu Met Ser Ile Val Leu Asp Val Asp Val | | |

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| Glu Pro Ser Thr Thr Pro Trp Asp Pro Ala Lys Ala Tyr Leu Phe Val | | |
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| Pro Val Thr Asp Asn Thr Ser Met Glu Pro Ile Lys Gly Ile Asn Trp | | |
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| Glu Leu Val Glu Lys Ile Thr Lys Thr Thr Ala Trp Asp Asn Pro Leu | | |
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| Gln Arg Ala Arg Pro Asp Val Tyr Leu Gly Thr Asn Glu Arg Thr Leu | | |
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| Gly Gly Asp Arg Arg Glu Tyr Gly Phe Gly Lys Leu Arg His Asn Ile | | |
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| Val Phe Gly Gln Lys Ser His Pro Thr Tyr Gly Ile Arg Gly Ala Val | | |
| 1155 | 1160 | 1165 |
| Ala Ser Phe Asp Val Val Arg Ala Ser Gly Leu Leu Pro Val Arg Asp | | |
| 1170 | 1175 | 1180 |
| Ala Phe Glu Lys Glu Val Glu Glu Asp Leu Ser Lys Gly Lys Leu Met | | |
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| Asp Met Ser Ala Glu Thr Ser Phe Pro Arg Lys Glu Gly Tyr Leu Gly | | |
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| Ser Glu Thr Val Leu Asp Lys Thr Tyr Tyr Val Phe Leu Pro Pro Glu | | |
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| | | |
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| Pro Asp Glu Val Asp Gly Thr Leu Lys Asn Val Asn Val Pro Glu Ser | | |
| 1540 | 1545 | 1550 |
| Val Leu Lys Ser Ile Asp Phe Val Gly Leu Glu Arg Ala Leu Lys Tyr | | |
| 1555 | 1560 | 1565 |
| Glu Phe Lys Glu Lys Gly Leu Leu Val Glu Ala Ile Thr His Ala Ser | | |

| | | |
|---|------|-----------|
| 1570 | 1575 | 1580 |
| Arg Pro Ser Ser Gly Val Ser Cys Tyr Gln Arg Leu Glu Phe Val Gly | | |
| 1585 | 1590 | 1595 1600 |
| Asp Ala Val Leu Asp His Leu Ile Thr Arg His Leu Phe Phe Thr Tyr | | |
| 1605 | 1610 | 1615 |
| Thr Ser Leu Pro Pro Gly Arg Leu Thr Asp Leu Arg Ala Ala Ala Val | | |
| 1620 | 1625 | 1630 |
| Asn Asn Glu Asn Phe Ala Arg Val Ala Val Lys His Lys Leu His Leu | | |
| 1635 | 1640 | 1645 |
| Tyr Leu Arg His Gly Ser Ser Ala Leu Glu Lys Gln Ile Arg Glu Phe | | |
| 1650 | 1655 | 1660 |
| Val Lys Glu Val Gln Thr Glu Ser Ser Lys Pro Gly Phe Asn Ser Phe | | |
| 1665 | 1670 | 1675 1680 |
| Gly Leu Gly Asp Cys Lys Ala Pro Lys Val Leu Gly Asp Ile Val Glu | | |
| 1685 | 1690 | 1695 |
| Ser Ile Ala Gly Ala Ile Phe Leu Asp Ser Gly Lys Asp Thr Thr Ala | | |
| 1700 | 1705 | 1710 |
| Ala Trp Lys Val Phe Gln Pro Leu Leu Gln Pro Met Val Thr Pro Glu | | |
| 1715 | 1720 | 1725 |
| Thr Leu Pro Met His Pro Val Arg Glu Leu Gln Glu Arg Cys Gln Gln | | |
| 1730 | 1735 | 1740 |
| Gln Ala Glu Gly Leu Glu Tyr Lys Ala Ser Arg Ser Gly Asn Thr Ala | | |
| 1745 | 1750 | 1755 1760 |
| Thr Val Glu Val Phe Ile Asp Gly Val Gln Val Gly Val Ala Gln Asn | | |
| 1765 | 1770 | 1775 |
| Pro Gln Lys Lys Met Ala Gln Lys Leu Ala Ala Arg Asn Ala Leu Ala | | |
| 1780 | 1785 | 1790 |
| Ala Leu Lys Glu Lys Glu Ile Ala Glu Ser Lys Glu Lys His Ile Asn | | |
| 1795 | 1800 | 1805 |
| Asn Gly Asn Ala Gly Glu Asp Gln Gly Glu Asn Glu Asn Gly Asn Lys | | |
| 1810 | 1815 | 1820 |
| Lys Asn Gly His Gln Pro Phe Thr Arg Gln Thr Leu Asn Asp Ile Cys | | |

| | | | |
|---|------|------|------|
| 1825 | 1830 | 1835 | 1840 |
| Leu Arg Lys Asn Trp Pro Met Pro Ser Tyr Arg Cys Val Lys Glu Gly | | | |
| 1845 | 1850 | 1855 | |
| Gly Pro Ala His Ala Lys Arg Phe Thr Phe Gly Val Arg Val Asn Thr | | | |
| 1860 | 1865 | 1870 | |
| Ser Asp Arg Gly Trp Thr Asp Glu Cys Ile Gly Glu Pro Met Pro Ser | | | |
| 1875 | 1880 | 1885 | |
| Val Lys Lys Ala Lys Asp Ser Ala Ala Val Leu Leu Leu Glu Leu Leu | | | |
| 1890 | 1895 | 1900 | |

Asn Lys Thr Phe Ser
1905

<210> 3
<211> 79
<212> PRT
<213> Drosophila

<400> 3
Asp Phe Leu Ala Ser Phe Leu Ser Glu Lys Thr Thr Ser Ile His Gly
1 5 10 15

Asp Arg Leu Gln Ser Gln Arg Glu Gln Ala Leu Arg Asp Phe Lys Asn
20 25 30

Gly Ser Met Lys Val Leu Ile Ala Thr Ser Val Ala Ser Arg Gly Leu
35 40 45

Asp Ile Lys Asn Ile Lys His Val Ile Asn Tyr Asp Met Pro Ser Lys
50 55 60

Ile Asp Asp Tyr Val His Arg Ile Gly Arg Thr Gly Cys Val Gly
65 70 75

<210> 4
<211> 78
<212> PRT
<213> S. cerevisae

<400> 4
His Arg Leu Arg Ile Ile Met Gly Leu Leu Val Gly Glu Leu His Gly
1 5 10 15

Ser Leu Thr Gln Glu Gln Arg Leu Asp Ser Val Asn Lys Phe Lys Asn
20 25 30

Leu Glu Val Pro Val Leu Ile Cys Thr Asp Leu Ala Ser Arg Gly Leu
35 40 45

Asp Ile Pro Lys Ile Glu Val Val Ile Asn Tyr Asp Met Pro Lys Ser
50 55 60

Tyr Glu Ile Tyr Leu His Arg Val Gly Arg Thr Ala Arg Ala
65 70 75

<210> 5

<211> 78

<212> PRT

<213> Arabidopsis thaliana

<400> 5

Leu Val Leu Pro Lys Val Phe Ala Glu Leu Ser Met Ile Gly His Asn
1 5 10 15

Glu Met Lys Ser Ser Gln Met Gln Asp Thr Ile Ser Lys Phe Arg Asp
20 25 30

Gly His Val Thr Leu Leu Val Ala Thr Ser Val Ala Glu Glu Gly Leu
35 40 45

Asp Ile Arg Gln Cys Asn Val Val Met Arg Phe Asp Leu Ala Lys Thr
50 55 60

Val Leu Ala Tyr Ile Gln Ser Arg Gly Arg Ala Arg Lys Pro
65 70 75

<210> 6

<211> 82

<212> PRT

<213> S. cerevisiae

<400> 6

Glu Arg Leu Ser Gly Leu Cys Asn Leu Leu Glu Phe Ser Ala Thr Ala
1 5 10 15

Leu His Gly Asp Leu Asn Gln Asn Gln Arg Met Gly Ser Leu Asp Leu
20 25 30

Phe Lys Ala Gly Lys Arg Ser Ile Leu Val Ala Thr Asp Val Ala Ala
 35 40 45

Arg Gly Leu Asp Ile Pro Ser Val Asp Ile Val Val Asn Tyr Asp Ile
 50 55 60

Pro Val Asp Ser Lys Ser Tyr Ile His Arg Val Gly Arg Thr Ala Arg
 65 70 75 80

Ala Gly

<210> 7
 <211> 81
 <212> PRT
 <213> *S. cerevisiae*

<400> 7
 His Arg Leu Arg Ile Ile Met Gly Leu Leu Gly Met Ser Val Gly Glu
 1 5 10 15

Leu His Gly Ser Leu Thr Gln Glu Gln Arg Leu Asp Ser Val Asn Lys
 20 25 30

Phe Lys Asn Leu Glu Val Pro Val Leu Ile Cys Thr Asp Leu Ala Ser
 35 40 45

Arg Gly Leu Asp Ile Pro Lys Ile Glu Val Val Ile Asn Tyr Asp Met
 50 55 60

Pro Lys Ser Tyr Glu Ile Leu His Arg Val Gly Arg Thr Ala Arg Ala
 65 70 75 80

Gly

<210> 8
 <211> 82
 <212> PRT
 <213> *Drosophila*

<400> 8
 Asp Phe Leu Ala Ser Phe Leu Ser Glu Lys Glu Phe Pro Thr Thr Ser
 1 5 10 15

Ile His Gly Asp Arg Leu Gln Ser Gln Arg Glu Gln Ala Leu Arg Asp

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 20 | | 25 | | 30 | | | | | | | | | | |
| Phe | Lys | Asn | Gly | Ser | Met | Lys | Val | Leu | Ile | Ala | Thr | Ser | Val | Ala | Ser |
| | 35 | | | | | | 40 | | | | | 45 | | | |
| Arg | Gly | Leu | Asp | Ile | Lys | Asn | Ile | Lys | His | Val | Ile | Asn | Tyr | Asp | Met |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Pro | Ser | Lys | Ile | Asp | Asp | Tyr | Val | His | Arg | Ile | Gly | Arg | Thr | Gly | Cys |
| | 65 | | | | | 70 | | | | 75 | | | | 80 | |
| Val | Gly | | | | | | | | | | | | | | |

<210> 9
 <211> 81
 <212> PRT
 <213> Arabidopsis thaliana

| | | | | | | | | | | | | | | | |
|-----|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | <400> 9 | | | | | | | | | | | | | | |
| Lys | Val | Phe | Ala | Glu | Leu | Pro | Ser | Leu | Ser | Phe | Ile | Arg | Cys | Ala | Ser |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Met | Ile | Gly | Glu | Met | Lys | Ser | Ser | Gln | Met | Gln | Asp | Thr | Ile | Ser | Lys |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Phe | Arg | Asp | Gly | His | Val | Thr | Leu | Leu | Val | Ala | Thr | Ser | Val | Ala | Glu |
| | | 35 | | | | | 40 | | | | | 45 | | | |
| Glu | Gly | Leu | Asp | Ile | Arg | Gln | Cys | Asn | Val | Val | Met | Arg | Phe | Asp | Leu |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Ala | Lys | Thr | Val | Leu | Ala | Tyr | Ile | Gln | Ser | Arg | Gly | Arg | Ala | Arg | Lys |
| | 65 | | | | | 70 | | | | 75 | | | | 80 | |
| Pro | | | | | | | | | | | | | | | |

<210> 10
 <211> 41
 <212> PRT
 <213> S. pombe

| | | | | | | | | | | | | | | | |
|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | <400> 10 | | | | | | | | | | | | | | |
| Glu | Arg | Leu | Glu | Phe | Leu | Gly | Asp | Ser | Phe | Phe | Asn | Leu | Phe | Thr | Thr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |

Arg Ile Ile Phe Ser Lys Phe Pro Gln Met Asp Glu Gly Ser Leu Ser
20 25 30

Lys Leu Arg Arg Lys Phe Val Gly Asn
35 40

<210> 11
<211> 41
<212> PRT
<213> Drosophila

<400> 11
Glu Arg Leu Glu Phe Leu Gly Asp Ser Val Leu Gly Phe Ile Ile Ala
1 5 10 15

Ser Glu Leu Tyr Gln Arg Arg Pro Gln Ala Arg Glu Gly Asp Leu Ser
20 25 30

Arg Met Arg Ala Ser Met Val Asn Gly
35 40

<210> 12
<211> 41
<212> PRT
<213> C. elegans

<400> 12
Gln Arg Leu Glu Phe Leu Gly Asp Ala Val Leu Asp Tyr Met Ile Thr
1 5 10 15

Arg Tyr Leu Phe Glu Asp Ser Arg Gln Tyr Ser Pro Gly Val Leu Thr
20 25 30

Asp Leu Arg Ser Ala Leu Val Asn Asn
35 40

<210> 13
<211> 41
<212> PRT
<213> Arabidopsis thaliana

<400> 13
Glu Arg Ala Glu Leu Leu Gly Asp Ala Tyr Leu Lys Trp Val Val Ser
1 5 10 15

Arg Phe Leu Phe Leu Lys Tyr Pro Gln Lys His Glu Gly Gln Leu Thr
 20 25 30

Arg Met Arg Gln Gln Met Val Ser Asn
 35 40

<210> 14
 <211> 65
 <212> PRT
 <213> Drosophila

<400> 14
 Pro Met Cys Leu Val Asn Glu Leu Ala Arg Tyr Asn Lys Ile Thr His
 1 5 10 15

Gln Tyr Arg Leu Thr Glu Glu Arg Gly Pro Ala His Cys Lys Thr Phe
 20 25 30

Thr Val Thr Leu Met Leu Gly Asp Glu Glu Tyr Ser Ala Asp Gly Phe
 35 40 45

Lys Ile Lys Lys Ala Gln His Leu Ala Ala Ser Lys Ala Ile Glu Glu
 50 55 60

Thr
 65

<210> 15
 <211> 65
 <212> PRT
 <213> Drosophila

<400> 15
 Pro Ile Ser Gln Val His Glu Ile Gly Ile Lys Arg Asn Met Thr Val
 1 5 10 15

His Phe Lys Val Leu Arg Glu Glu Gly Pro Ala His Met Lys Asn Phe
 20 25 30

Ile Thr Ala Cys Ile Val Gly Ser Ile Val Thr Glu Gly Glu Gly Asn
 35 40 45

Gly Lys Lys Val Ser Lys Lys Arg Ala Ala Glu Lys Met Leu Val Glu
 50 55 60

Leu
65

<210> 16
<211> 64
<212> PRT
<213> Drosophila

<400> 16
Pro Ile Thr Lys Leu Ile Gln Leu Gln Gln Thr Arg Lys Glu Lys Glu
1 5 10 15

Pro Ile Phe Glu Leu Ile Ala Asn Gly Asn Glu Thr Ala Arg Arg Arg
20 25 30

Phe Val Met Glu Val Ser Ala Ser Gly Ser Thr Ala Arg Gly Thr Gly
35 40 45

Asn Ser Lys Leu Ala Lys Arg Asn Ala Ala Gln Ala Leu Phe Glu Leu
50 55 60

<210> 17
<211> 73
<212> PRT
<213> Arabidopsis thaliana

<400> 17
Thr Arg Gln Thr Leu Asn Asp Ile Cys Leu Arg Lys Asn Trp Pro Met
1 5 10 15

Pro Ser Tyr Arg Cys Val Lys Glu Gly Gly Pro Ala His Ala Lys Arg
20 25 30

Phe Thr Phe Gly Val Arg Val Asn Thr Ser Asp Arg Gly Trp Thr Asp
35 40 45

Glu Cys Ile Gly Glu Pro Met Pro Ser Val Lys Lys Ala Lys Asp Ser
50 55 60

Ala Ala Val Leu Leu Leu Glu Leu Leu
65 70

<210> 18

<211> 61

<212> PRT

<213> *Arabidopsis thaliana*

<400> 18

Pro Val Arg Glu Leu Gln Glu Arg Cys Gln Gln Gln Ala Glu Gly Leu
1 5 10 15

Glu Tyr Lys Ala Ser Arg Ser Gly Asn Thr Ala Thr Val Glu Val Phe
20 25 30

Ile Asp Gly Val Gln Val Gly Val Ala Gln Asn Pro Gln Lys Lys Met
35 40 45

Ala Gln Lys Leu Ala Ala Arg Asn Ala Leu Ala Ala Leu
50 55 60